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CC:
Subject: AP: CDC scientist: Testing needed on gas drilling impact

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By:AP
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One of the government's top scientists says much more research is needed to determine the possible impacts of shale gas drilling on human health and the environment.

"Studies should include all the ways people can be exposed, such as through air, water, soil, plants and animals," Dr. Christopher Portier wrote to The Associated Press in an email.

Portier is director of the National Center for Environmental Health at the federal Centers for Disease Control and Prevention in Atlanta.

While other federal and state regulators are already studying the impacts of gas drilling on air and water, Portier said research should also include "livestock on farmed lands consuming potentially impacted surface waters; and recreational fish from potentially impacted surface waters."

Portier made clear that the science on the issue isn't settled yet.

"We do not have enough information to say with certainty whether shale gas drilling poses a threat to public health," he wrote. "More research is needed for us to understand public health impacts from natural gas drilling and new gas drilling technologies."

He also suggested pre- and post-testing of private drinking water wells near drilling sites.

Another prominent scientist said the answers won't come quickly.

"I think it will take three to five years to sort through this," Duke University researcher Rob Jackson told AP in an email.

Jackson said that doesn't mean there isn't evidence of water contamination by drilling in some communities— Wyoming, for example, or Dimock, Pa.

"On the other hand a handful of cases of contamination is not enough to shut down an industry," he said.

Jackson was part of a team behind a much-discussed study last spring on possible water well contamination from drilling in Pennsylvania. Environmentalists hailed the study, while others, including the head of the state Department of Environmental Protection, criticized it.

The question of whether gas drilling causes health impacts has led to angry debates. Some environmentalists and people in communities where drilling is occurring say there are clear and major risks, while the industry says those fears are exaggerated, and that the process been used safely on tens of thousands of wells nationwide. And though regulatory agencies in some states have determined the practice is safe, other states – and recently, the Environmental Protection Agency – have found evidence of contamination from either methane or the fluids used in fracking. Jackson said both sides in the debate should be prepared for mixed news.

"I suspect what you'll see over the next year or two are new papers that won't find significant evidence of contamination and new papers that will. The best response would be to try and understand what causes the difference," he wrote, adding that extremists on both sides will try and spin all the news.

"Many people outside of the scientific community won't want to accept a mixed message. They'll dismiss one set of papers outright as biased and latch on to the other set that upholds their belief system—on both sides of the issue," Jackson said.

Jackson said researchers may find that drilling is overwhelmingly safe in one area, but not everywhere.

"What's safe in Oklahoma might not be an acceptable risk somewhere else, where the population density is higher. And you have different geology," he said.

Vast deposits of natural gas that couldn't be produced economically just a decade ago are now being unlocked by hydraulic fracturing, or fracking, which involves pumping pressurized water, sand and chemicals underground to open fissures and improve the flow of oil or gas to the surface.

Thousands of the deep wells have been drilled across the nation in recent years, and the shale gas boom is expanding to more and more states. It's generating jobs and enormous profits and is helping to keep energy costs down.

Adding to the confusion, some water wells in Pennsylvania and other states were contaminated with naturally existing methane gas even before drilling began.

Portier said one huge issue is that there is no accepted medical standard for the symptoms that may come from exposure to gas drilling activities.

"This poses an extremely complex problem for epidemiology researchers, given the range of possible environmental exposures that are currently not well defined," he said.

In layman's terms, that means that if a person who lives near a gas drilling site gets sick, doctors don't have enough information to say whether the drilling or other environmental or physical factors are to blame. But Jackson said the complexity doesn't mean waiting is the only answer.

He's working on a list of recommendations that could help researchers and industry answer some of the key questions about possible methane contamination of drinking water.

In December, the U.S. EPA announced that fracking may be to blame for groundwater pollution in a Wyoming community. But the agency said the findings are preliminary and need more review, and that the fracking that occurred there differed from methods used in other regions with different geological characteristics.

EPA is also working on a nationwide review of fracking, with plans to examine drilling sites in Pennsylvania, Colorado, Louisiana, North Dakota and Texas. The earliest results will be available this year.

EPA has already taken steps recently to boost federal regulation of fracking, announcing it will develop national standards for the disposal of the briny, chemical-laced wastewater and proposing controls on air pollution at oil and gas wells, particularly where fracking is used.

Drillers and many states have resisted enhanced federal regulation, saying it should be left up to individual states.